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wherein said first backing layer and said first adhesive surface are stretchable together to effect progressive debonding of said first adhesive surface from an object, after said first adhesive surface is bonded to that object, by the application of a force to said first manually engageable tab portion in a direction of extension, and further wherein said second backing layer and said second adhesive surface are stretchable together to effect progressive debonding of said second adhesive surface from an object, after said second adhesive surface is bonded to that object, by the application of a force to said second manually engageable tab portion in a direction of extension. --

Remarks

Applicant respectfully acknowledges the helpful interview granted by the Examiner to discuss Applicant's proposed amendment. Claims 41-45 have been added. Claims 1-45 now stand in the application.

The specification has been amended to include the elongation at break of the backing. Support for this amendment appears at page 1, line 26 - page 2, line 6 of U.S. Patent Application No. 08/308,937 (Bries et al.) which is incorporated by reference into the present application at page 25, lines 17-20.

Claims 1-4, 6-8, 21-24 and 26-28 stand rejected under 35 U.S.C. 102(b) as being anticipated by Kobe WO 94/21742. A claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Kobe fails to describe a non adhesive manually engageable tab portion. Independent claims 1 and 21 have been amended to include a non adhesive manually engageable tab portion to facilitate stretching of the adhesive tape. Accordingly, the rejection is believed to be overcome. Support for this amendment appears on page 9, lines 17-29 of the specification. New independent claims 41, 44, and 45 also include a non adhesive manually engageable tab portion.

In addition, Applicant disagrees with the assertion that acrylonitrile-butadiene-styrene polymer is inherently stretchable. An acrylonitrile-butadiene-

styrene polymer can have widely varying properties depending on the proportion of acrylonitrile, butadiene, and styrene in the composition. While a butadiene polymer may be stretchable, acrylonitrile and styrene are considered hard monomers and polymers formed with such materials may not be stretchable. Thus, some acrylonitrile-butadiene-styrene polymers may be stretchable, but some may be quite rigid. In the absence of any detail as to the specific nature of the acrylonitrile-butadiene-styrene polymer, it is improper to assume that the particular composition contemplated by Kobe would be stretchable. In addition, as discussed below, there is evidence in Kobe to support the conclusion that none of the backing materials disclosed by Kobe were intended to be stretchable.

Applicant also believes that Kobe fails to disclose an adhesive tape laminate including a stretchable backing layer with an adhesive surface "wherein said first backing layer and said adhesive surface are stretchable together to effect progressive debonding of the adhesive surface from an object" as recited in independent claims 1 and 21. In the Office Action, it is asserted that the backing layer of the Kobe fastener can be formed of acrylonitrile-butadiene-styrene polymer and that such a polymer is inherently stretchable. Simply because the backing may be capable of being stretched, however, does not lead to the implied conclusion that Kobe discloses a stretch releasing tape strip. A tape's ability to stretch and progressively debond from a surface depends on a variety of properties of both the backing and the adhesive. For example, the adhesion must be lower than the cohesion to allow the tape to be cleanly removed, and the tensile strength must be sufficiently high to allow the tape to be stretched without rupturing, but low enough so that stretching the tape does not become inordinately difficult. Since there is no indication that the fastener of Kobe includes the necessary combination of properties to make it capable of stretch releasing, there is no support for the conclusion that the fastener of Kobe is stretchable to effect progressive debonding of the adhesive surface from an object.

Claims 1-4, 6-8, 21-24 and 26-28 also stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kobe in view of Kreckel, U.S. Patent No. 5,516,581. Applicant has carefully reviewed both the Kobe and Kreckel references and respectfully disagrees that these references render the present invention unpatentable.

Kobe relates generally to a non-tacky contact responsive fastener system which can be repeatedly fastened and released from a target surface. Kreckel relates generally to a removable adhesive tape. In determining obviousness, the inquiry is not whether each element existed in the prior art, but whether the prior art made the claimed invention as a whole obvious. Hartness Int'l, Inc. v. Simplimatic Eng'g Co., 2 USPQ2d 1826, 1832 (Fed. Cir. 1987). The cited references fail to provide any teaching, motivation, or suggestion, either implicit or explicit, to combine or modify them as suggested by the Examiner. Each reference discloses a tape which is complete and functional in itself, so there would be no reason to modify them. More specifically, there is no reason to modify the fastener of Kobe to include the stretch releasing feature of Kreckel, and there is no reason for the stretch releasing tape of Kreckel to be modified to include the multiply refastenable contact responsive fastener system of Kobe.

It is also noted that many of the materials described in Kobe for the backing layer, such as polycarbonate, polymethylmethacrylate, polystyrene, and polyester, are not stretchable. Paper, fabric and metal are also mentioned. Thus, it does not appear that the backing's ability to stretch was of particular importance or concern to Kobe. Moreover, none of the applications described for the Kobe fastener indicate that the fastener itself is intended to be removed from the object or surface to which it has been applied. In this regard, the Examiner's attention is directed to page 11, line 17 - page 15, line 8 of the Kobe reference.

Kobe also provides that the preferred backing layer has a tensile strength of at least about 1500 Mega Pascals (MPa). (Page 10, line 7). This is equivalent to approximately 218,000 psi. Kreckel, in contrast, specifies that the backing have a tensile strength at break which is sufficiently high so that the backing will not rupture prior to the tape's removal from the surface to which it has been adhered. A suitable tensile strength is in the range of from at least about 4,300 psi to at least about 6,300 psi. (Col. 3, lines 55-61) Thus, the desired tensile strength of the backing for the Kobe fastening system and the desired tensile strength of the backing for the Kreckel tape are specified in terms which vary by more than an order of magnitude. Accordingly, the teachings of Kobe and Kreckel teach away from making the combination suggested by the Examiner. Furthermore, if a backing having a tensile strength of at least 1500 MPa were used in the present

invention, the tape would be extremely difficult to stretch and most likely incapable of being stretched to progressively debond from a surface. Applicant is not aware of any material with such a high tensile strength that would exhibit a sufficiently low Young's modulus to make it useful in the present invention.

New independent claims 41, 44, and 45 are directed to the same subject matter as independent claim 1, but more specifically characterize the stretchable backing layer of the invention and are therefore slightly narrower in scope than claim 1. Each of these claims is believed to be allowable for the reasons presented above in connection with claim 1. Support for new claim 41 appears in the material incorporated by reference. Support for new claim 42 appears in the specification at page 8, lines 12-14. Support for the single layer of pressure-sensitive adhesive in new claim 43 appears in the specification at page 9, line 6. Support for removal angle feature of new claim 44 appears in the specification at page 28, lines 21-23.

Since all claims are believed to be patentably distinguishable from the cited prior art, allowance of the claims is respectfully solicited. If the Examiner believes there are any outstanding matters in the present application which could be resolved with a telephonic conference, the Examiner is encouraged to contact Applicants' undersigned representative.

Respectfully submitted,

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